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## **ELECTRONIC BALLAST SYSTEM**

### **ABSTRACT OF THE DISCLOSURE**

An electronic ballast for use in illuminating a lamp includes a lamp driving circuit having a pulse-width modulated signal generator, a timing capacitor coupled to the lamp driving circuit, and a power controller. The power controller uses a current sense resistor to detect a current flowing through the lamp and an operational amplifier circuit to compare a signal associated with the detected current to a reference voltage associated with a desired lamp current. Based on the comparison, the power controller provides a correction current to the timing capacitor to control a duty cycle of an output of the pulse-width modulated signal generator.

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